



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,854	09/25/2003	Hidetoshi Watanabe	116800	4388

25944 7590 05/09/2005
OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

NGUYEN, THINH H

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,854

Applicant(s)

WATANABE ET AL.

Examiner

Thinh H. Nguyen

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 3,5-10 and 15-24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/5/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, 11-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by prior art of record to Takahiro et al. (EP 0413340 A1)

Takahiro (figs.1(b), 2, 3, 6, and 9) discloses elements of the instant claimed inkjet head, comprising a plurality of ink pressure chambers, each of said ink pressure chambers selectively pressurizing ink supplied thereto to eject the ink from said inkjet head;

a manifold channel (4) being in fluid communication with each of said ink pressure chambers (2) to distribute the ink thereamong; and

Re claims 1 and 14, a land block (characterized by constricted portion 3, col.2, line 37-50) provided in said manifold channel, said land block being encircled (loop) with the ink.

Re claim 2 (fig.2), wherein said inkjet head has a laminated structure of a plurality of plates (as described by nozzle plate 10, vibrating plate 8, manifold plate 1) including at least one manifold plate for defining said manifold channel, said at least

one manifold plate having an opening (characterized by openings communicating with the ink supply pipe 9) formed therethrough, a land portion which is a portion of said at least one manifold plate left in said opening being provided within said opening, said opening of said at least one manifold plate defining said manifold channel, said land portion of at least one manifold plate forming said land block.

Re claim 4 (col.2, line 37), wherein said opening is formed by etching said manifold plate

Re claim 11 (fig.7, 8), wherein said inkjet head has a laminated structure of a plurality of plates, said plates including a first manifold plate formed with an opening for defining said manifold channel, a separate plate piece being placed in said opening for forming said land block, said separate plate piece being supported by two of said plates sandwiching said first manifold plate.

Re claim 12 (fig.7, 8), a plurality of plates including a plurality of manifold plates stacked on each other, wherein each of said plurality of manifold plates is formed with a through opening, the through openings of said plurality of manifold plates as stacked defining said manifold channel, and wherein said land block is supported by at least one supporting member (as shown as plate pieces support the vibrating plate 8) that is provided to at least one of said plurality of manifold plates.

Re claim 13, a plurality of ink supply channels connected to said manifold channel to supply ink from external ink supply (as described as an ink tank (not shown), col.5, line 32) to said manifold channel.

Allowable Subject Matter

3. Claims 3, 5-10, 15-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Patent Application Information Retrieval (PAIR)

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Contact Information

5. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 9:00A – 5:00P. The official fax phone number for the organization is (703) 872-9306. The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.


Thinh Nguyen

April 28, 2005

Thinh Nguyen
Primary Examiner
Technology Center 2800